

**REMARKS/ARGUMENTS**

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 11 and 13 - 24 are pending in the application. Currently, all claims stand rejected.

By the present amendment, claims 11 and 18 have been amended.

In the office action mailed July 6, 2009, claims 11, 13 - 15 and 18 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,886,256 to Nishiyama; claims 18 and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,402,750 to Atkinson in view of Nishiyama; claims 11, 13 - 20 and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,540,688 to Navas in view of Nishiyama; claims 21 and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Navas in view of Nishiyama and U.S. Patent Publication No. 2001/0012937 to Schaffler-Wachter

The foregoing rejections are traversed by the instant response.

Independent claim 11 is directed to a linking element for a spinal fixation system designed to link at least two implantable

connecting assemblies. The linking element is capable of being deformed from a linear state to a curved state and comprises at least partly of a support made of a flexible polymer material which allows the support to be curved, and a rod substantially coaxial with said support, a spring being formed of a plurality of turns surrounding the rod and being at least coextensive in length with said support, said support being cylindrical or tubular in shape and having an inner diameter, said turns having an inner diameter which forms a cylindrical space in which said rod is positioned and an external diameter which is greater than said inner diameter of said support resulting in said turns being at least partly embedded in said polymer material of said support.

Independent claim 18 is directed to a spinal fixation system comprising at least two implantable connecting assemblies linked by at least one linking element having the same structure as the linking element of claim 11. Claim 18 however says that the turns have an inner diameter which forms a cylindrical space in which said rod is positioned and an external diameter which is greater than said inner diameter of said support resulting in said turns being at least partly enclosed in the polymer material of said support.

The linking element of the present invention enables various and different displacements of the spine, i.e. flexion,

tearing and distraction. In other words, it allows any freedom in terms of compression or distraction between the screws after the elements have been put in place. This problem is not solved by the shock absorber shown in the Nishiyama et al. patent.

Further, the support in the linking element of the present invention is flexible so that it can be curved. This feature is not disclosed in Nishiyama et al. This flexibility is important in order to adapt the linking element to the natural curvature of the lumbar spine.

With regard to the rejection of claim 11 on anticipation grounds over Nishiyama et al. '256, the rejection fails because the shock absorber shown in Nishiyama does not have a linking element "which is capable of being deformed from a linear state to a curved state" and further lacks "a support made of a flexible polymer material which allows the support to be curved." In the embodiment shown in Figure 4 of Nishiyama, it is not possible for the shock absorber, which the Examiner considers to be the linking element, to move from a linear state to a curved state because of the strictly linear relationship between the rod (54) and the cylindrical part (48). Still further, it should be noted that the Nishiyama device is not capable of linking at least two implantable connecting assemblies. Nishiyama is a shock absorber for a vehicle. It has nothing to do with the present invention which is directed

to a linking element for a spinal fixation system and most certainly does not disclose any possible way it could be used to link at least two implantable connecting assemblies.

Claims 13 - 15 and 23 - 25 are allowable for the same reasons as claim 11 as well as on their own accord.

With respect to the rejection of claims 18 and 26 on obviousness grounds over Atkinson in view of Nishiyama et al., this rejection fails because Nishiyama et al. is non-analogous art and the rejection is nothing more than impermissible hindsight rejection. Nishiyama et al. (1) is clearly in a different field of endeavor, i.e. shock absorbers for vehicles, than applicant's field of endeavor, i.e. medical equipment, and (2) is not reasonably pertinent to the particular problem faced by applicant, namely developing a flexible linking element for use in a spinal fixation system which has a support which is flexible so as to enable the linking element to adapt to the natural curvature of the lumbar spine. See *In re Deminski*, 796 F.2f 436, 442 (Fed. Cir. 1986). One of ordinary skill in the art would have absolutely no reason to combine the references in the manner suggested by the Examiner. The Examiner has failed to make any showing that a person of ordinary skill in the art seeking to solve a problem with a spinal fixation system would look to shock absorbers for vehicles. A combination of elements from non-analogous sources, in a manner that reconstructs the

applicant's invention only with the benefit of hindsight, is insufficient to establish a *prima facie* case of obviousness. The knowledge used to combine the references can not come from the applicant's invention itself. See *Diversitech Corp. v. Century Steps, Inc.*, 859 F.2d 675, 678-79 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686, 687 (Fed. Cir. 1987). While Applicant's invention may seem simple, simplicity is not inimical to patentability. See *Goodyear Tire & Rubber Co. v. Ray-O-Vac Co.*, 321 U.S. 275, 279 (1944) ("Simplicity of itself does not negative invention").

With respect to the rejection of claims 11, 13 - 20, and 26 under 35 U.S.C. 103(a) based upon Navas and Nishiyama, this rejection also fails because Nishiyama et al. is non-analogous art and the rejection is nothing more than an impermissible hindsight rejection. Nishiyama et al. is non-analogous art for the reasons stated above. As a result, there is absolutely no reason why one of ordinary skill in the art would combine Navas and Nishiyama et al. in the manner set forth by the Examiner. The only reason that the Examiner suggests the proposed combination is that he is recreating the claimed invention by hindsight. Finally, even if one of ordinary skill in the art would combine the references in the manner suggested by the Examiner, he/she would not arrive at the invention set forth in amended claims 11 and 18.

Claims 12 - 17, 19, 20, and 26 are allowable for the same reasons as claims 11 and 18 as well as on their own accord.

With regard to the rejection of claims 21 and 22 under 35 U.S.C. 103(a) as being unpatentable over Navas in view of Nishiyama et al. and further in view of Schaffler-Wachter, these claims are allowable for the same reasons as their parent claims. The Schaffler-Wachter patent does not cure the deficiencies of the Navas and Nishiyama et al. references.

The instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicant's attorney at the telephone number listed below.

The instant amendment after final rejection should be entered since it does not raise any new issue which requires further consideration and/or search on the part of the Examiner. Furthermore, it does not raise any issue of new matter.

Appended hereto is a Notice of Appeal. The Director is hereby authorized to charge the notice of appeal fee of \$540.00 to Deposit Account No. 02-0184. If the Director determines that an additional fee is due,

he is hereby authorized to charge said fee to said Deposit  
Account No. 02-0184.

Respectfully submitted,

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